What is claimed is :

1. A system for multi-path simulation comprising:

a signal generator for generating a signal;

an attenuating device coupled to the signal generator for attenuating the signal and generating an attenuated signal to simulate an attenuation resulting from a transmission of the signal; and

a shielded anechoic chamber comprising:

an antenna coupled to the attenuating device for transmitting the attenuated signal, wherein the antenna can be shifted to simulate a phase shift between a direct path and a main indirect path of the system; and

a reflector for reflecting the attenuated signal to generate a reflected signal.

2. The system of claim 1, wherein the shielded anechoic chamber further comprises:

a communication device for receiving the attenuated signal and the reflected signal.

3. The system of claim 1, wherein the signal generator is a vector signal generator.

4. The system of claim 2, wherein the signal generator is a Golden Sample of the communication device.

5. The system of claim 1, wherein the attenuating device is a step attenuator.

6. The system of claim 1, wherein the antenna is a dipole antenna.

7. The system of claim 2, wherein the antenna is deployed between the reflector and the communication device.

8. The system of claim 1, further comprising:

a control unit coupled to the signal generator and the attenuating device

for controlling a generation of the signal and adjusting an attenuating range of the attenuating device.

9. The system of claim 2, further comprising:

a control unit coupled to the communication device for acquiring signal properties received by the communication device.

10. The system of claim 2, wherein the shielded anechoic chamber further comprises:

a turntable for setting the communication device and changing a reception azimuth of the communication device.

11. The system of claim 2, wherein the shielded anechoic chamber further comprises:

a movable platform for setting and shifting the antenna.

12. The system of claim 2, wherein the communication device is deployed in a quiet zone of the shielded anechoic chamber.

13. A method for multi-path simulation comprising:

generating a signal;

attenuating the signal to generate an attenuated signal for simulating an attenuation resulting from a transmission of the signal;

transmitting the attenuated signal by an antenna, wherein the antenna is deployed in a shielded anechoic chamber with a reflector, and the reflector reflects the attenuated signal to generate a reflected signal; and

receiving the attenuated signal and the reflected signal by a communication device deployed within the shielded anechoic chamber.

14. The method of claim 13, wherein the signal is generated by a vector signal generator.

15. The method of claim 13, wherein the signal is generated by a Golden Sample of the communication device.

16. The method of claim 13, wherein the signal is attenuated by a step attenuator.

17. The method of claim 13, wherein the antenna is deployed between the reflector and the communication device.

18. The method of claim 13, further comprising:

shifting the antenna to simulate a phase shift between a direct transmission path and a main indirect transmission path of the signal.

19. The method of claim 13, wherein the communication device is set on a turntable, and the method further comprising :

rotating the turntable to change a reception azimuth of the communication device.

20. The method of claim 13, wherein the communication device is deployed in a quiet zone of the shielded anechoic chamber.

21. A method for measuring a diversity gain of a communication device, the communication device switching between a single antenna mode and an antenna diversity mode and deployed within a shielded anechoic chamber, the method comprising steps of:

a. setting the communication device to the single antenna mode;

b. generating a testing signal;

c. attenuating the testing signal by a first attenuation setting;

d. transmitting the attenuated testing signal by an antenna within the shielded anechoic chamber, wherein the shielded anechoic chamber includes a reflector for reflecting the attenuated testing signal to generate a reflected signal;

e. receiving the attenuated testing signal and the reflected signal by the communication device;

f. measuring a signal parameter received by the communication device to acquire a reference value;

g. switching the communication device to the antenna diversity mode

and repeating the steps b to e;

h. attenuating the testing signal by a second attenuation setting to make the signal parameter equal to the reference value; and

i. calculating a difference between the first and second attenuation settings, wherein the difference is the diversity gain of the communication device.

22. The method of claim 21, wherein the communication device is deployed in a quiet zone of the shielded anechoic chamber.

23. The method of claim 21, wherein the antenna is deployed between the reflector and the communication device.

24. The method of claim 21, wherein the testing signal is generated by a vector signal generator in the step b.

25. The method of claim 21, wherein the testing signal is generated by a Golden Sample of the communication device in the step b.

26. The method of claim 21, wherein the testing signal is attenuated by a step attenuator in the steps c and h.

27. The method of claim 21, further comprising:

j. shifting the antenna to change a phase shift between a direct transmission path and a main indirect transmission path of the attenuated testing signal, and repeating the steps a to i.

28. The method of claim 21, wherein the communication device is set on a turntable, the method further comprising:

k. rotating the turntable to change a reception azimuth of the communication device, and repeating the steps a to i.

29. The method of claim 21, wherein the signal parameter is selected from a group consisting of signal strength, a signal quality parameter and throughput.